

Part II-C: CTL References

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- diversity to an immunodominant epitope was suggested to facilitate immune escape. gp41 epitope: ERYLKDDQL. An HLA B14 restricted RT epitope from this individual used V α 21 and V β 14, showing use of these genes was not a feature of all HLA B14 restricted clones from this individual. RT epitope: AIYLALQDSGLEVNIVTDSQYALGI.
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I molecule showed striking similarity among the CTL of each haplotype, expressing either V beta 8.1 or V beta 14. In contrast, the fine specificity is different between the distinct MHC class I molecules even for the lysis by the same CTL, as shown by reciprocal effects of the same substitutions. Thus, peptide fine specificity of a single TCR is influenced by changes in the class I MHC molecules presenting the Ag.

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potential role of HLA class I-restricted cytolysis has remained controversial. Here we demonstrate that HIV-1-specific cytotoxic T lymphocytes (CTL) mediate antiviral suppression by both cytolytic and noncytolytic mechanisms. The predominant mechanism requires direct contact of CTL with the infected cells, is HLA class I restricted, and can achieve complete elimination of detectable virus in infected cell cultures. Inhibition occurs even at high multiplicities of infection or at ratios of CTL to CD4 cells as low as 1:1,000. The other mechanism is mediated by soluble inhibitory factors which are triggered in an antigen-specific and HLA-restricted fashion but then act without HLA restriction.

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